## **AMENDMENTS TO THE CLAIMS**

Please amend claims as follows:

## 1. (Currently Amended) A diagnostic method comprising:

outputting a Noise-Vocoded Speech Sound signal that is obtained by dividing at least one portion of a sound signal into a frequency band signal and subjecting the frequency band signal to noise;

receiving a response of a patient; and

diagnosing a disease of the patient based on the response;

wherein the Noise-Vocoded Speech Sound signal is a word or a sentence in which a component of a sound source signal is subjected to noise is generated by:

extracting a frequency band signal with a predetermined frequency band from at least one portion of the sound signal by a first band filtering procedure having a plurality band filtering procedures;

extracting an amplitude envelope of each frequency signal by an envelope extracting procedure;

generating a frequency band noise signal corresponding to the predetermined frequency band from a noise source signal by a second band filtering procedure having a plurality of band filtering procedures;

multiplying the amplitude envelope of each frequency signal by the frequency band noise signal in a multiplying procedure; and

accumulating outputs obtained by the multiplying procedure in an adding procedure.

## 2. (Currently Amended) A diagnostic method comprising:

outputting a Noise-Vocoded Speech Sound signal that is obtained by dividing at least one portion of a sound signal into a plurality of frequency band signals and subjecting the frequency band signals to noise;

receiving a response of a patient; and

diagnosing a disease of the patient based on the response;

wherein the Noise-Vocoded Speech Sound signal in which a component of a sound source signal is subjected to noise is generated by:

extracting a frequency band signal with a predetermined frequency band from at least one portion of the sound signal by a first band filtering procedure having a plurality band filtering procedures;

extracting an amplitude envelope of each frequency signal by an envelope extracting procedure;

generating a frequency band noise signal corresponding to the predetermined frequency band from a noise source signal by a second band filtering procedure having a plurality of band filtering procedures;

multiplying the amplitude envelope of each frequency signal by the frequency band noise signal in a multiplying procedure; and

accumulating outputs obtained by the multiplying procedure in an adding procedure.

3. (Previously Presented) The diagnostic method according to claim 1, wherein a disease is estimated with reference to disease database, based on information corresponding to the output Noise Vocoded Speech Sound signal and the response.

## 4. (Canceled)

- 5. (Previously Presented) The diagnostic method according to claim 1, wherein at least one of a number of the band filtering procedures for division into frequency band signals and a frequency of a frequency band boundary can be changed, at least depending on the language.
- 6. (Previously Presented) The diagnostic method according to claim 1, wherein at least one of a number of the band filtering procedures for division into frequency band signals and a frequency of a frequency band boundary can be changed through automatic language recognition.
- 7. (Previously Presented) The diagnostic method according to claim 1, comprising a sound signal extracting procedure for extracting only a sound component from a sound signal, wherein the Noise Vocoded Speech Sound signal is obtained by converting at least one portion of the extracted sound component to a Noise Vocoded Speech Sound signal.

8. (Previously Presented) A diagnostic device for executing the method according to claim 1.

- 9. (Canceled)
- 10. (Canceled)
- 11. (Previously Presented) The diagnostic method according to claim 2, wherein a disease is estimated with reference to disease database, based on information corresponding to the output Noise Vocoded Speech Sound signal and the response.
- 12. (Currently Amended) The diagnostic method according to claim 3, wherein the Noise-Vocoded Speech Sound signal in which a component of a sound source signal is subjected to noise is generated by:

extracting a frequency band signal with a predetermined frequency band from at least one portion of the sound signal by a first band filtering procedure having a plurality band filtering procedures;

extracting an amplitude envelope of each frequency signal by an envelope extracting procedure; generating a frequency band noise signal corresponding to the predetermined frequency band from a noise source signal by a second band filtering procedure having a plurality of band filtering procedures;

multiplying the amplitude envelope of each frequency signal by the frequency band noise signal in a multiplying procedure; and

accumulating outputs obtained by the multiplying procedure in an adding procedure.

13. (Currently Amended) The diagnostic method according to claim 11, wherein

the Noise-Vocoded Speech Sound signal in which a component of a sound source signal is subjected to noise is generated by:

extracting a frequency band signal with a predetermined frequency band from at least one portion of the sound signal by a first band filtering procedure having a plurality band filtering procedures;

extracting an amplitude envelope of each frequency signal by an envelope extracting procedure; generating a frequency band noise signal corresponding to the predetermined

frequency band from a noise source signal by a second band filtering procedure having a plurality of band filtering procedures;

multiplying the amplitude envelope of each frequency signal by the frequency band noise signal in a multiplying procedure; and

accumulating outputs obtained by the multiplying procedure in an adding procedure.

- 14. (Previously Presented) A diagnostic device for executing the method according to claim 2.
- 15. (Currently Amended) A diagnostic device for executing the method according to claim 1.